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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/763,793	02/27/2001	Hiromasa Miyaji	766.46	3687

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EXAMINER	
SHAFER, SHULAMITH H	

ART UNIT	PAPER NUMBER
1647	

DATE MAILED: 12/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/763,793	MIYAJI ET AL.	
	Examiner	Art Unit	
	Shulamith H. Shafer, Ph.D.	1647	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 February 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-66* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) _____ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) *1-66* are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claims 1-41 are the claims originally presented in the instant application. In communication of 27 February 2001, claims 3, 5, 6, 8, 12, 13, 15, 16, 18, 20, 23-25, 30-33, 38-41 and 45 have been amended; the amendments have been entered. New claims 46-66 have been presented and made of record. Claims 1-66 are pending in the instant application.

Election/Restrictions

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-12, 26-29, 42, 46-48 drawn to polypeptides, nucleic acids encoding said polypeptides, vectors comprising said nucleic acids, and transformants comprising said vectors.

Group II, claim(s) 13, 14, 30-33, 49, 54-58, 60, 62, and 64, drawn to oligonucleotides.

Group III, claim(s) 15 and 50, drawn to method for detecting mRNA using an oligonucleotide.

Group IV, claim(s) 16, and 51, drawn to method of inhibiting expression of a polypeptide using oligonucleotide.

Group V, claim(s) 17, 19, 34-37, 59, drawn to an antibody.

Group VI, claim(s) 18, drawn to an immunological detection method.

Group VII, claim(s) 20, drawn to method for screening compound capable of changing transport activity of a polypeptide.

Group VIII, claim(s) 21, drawn to compound which is capable of changing transport activity of a polypeptide.

Group IX, claim(s) 22, in part, and 23, drawn to a method for screening compound capable of changing gene expression, the method involving detection of mRNA.

Group X, claim(s) 22 in part, and 24, drawn to a method for screening compound capable of changing gene expression, the method involving detection of a polypeptide.

Group XI, claim(s) 25, in part and 52, drawn to compound, detected by method of Group IX, capable of changing gene expression.

Group XII, claim(s) 25, in part, and 53, drawn to compound, detected by method of Group X.

Group XIII, claim(s) 43 and 44, drawn to method for screening compound capable of changing efficiency of transcription.

Group XIV, claim(s) 45, drawn to compound capable of changing efficiency of transcription.

The inventions listed as Groups I-XIV do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

37 CFR 1.475 states: The expression "special technical features" shall mean those technical features that define a contribution which each of the claimed inventions, considered as a whole, makes over the prior art. The first claimed invention is drawn to multiple polypeptides, each comprising a sequence of unique structural and functional characteristics. Since the first claimed invention does not recite a single special technical feature, it cannot share a special technical feature with any of the inventions of Groups II-IV.

Species Election #1

If Invention **I** is elected, the following election of species is required:

This application contains claims directed to the following patentably distinct species: Sequences. Applicant is required under 35 U.S.C. 121 to elect a single disclosed species, **A or B**, for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. The species are

independent or distinct because sequence represents an amino acid structure of unique functional characteristics.

A. DNA of SEQ ID NO:2 encoding polypeptide of SEQ ID NO:1

B. DNA of SEQ ID NO:6 encoding polypeptide of SEQ ID NO:5

Species Election #2

If any of Inventions **II-IV, IX or XI** are elected, the following election of species is required:

This application contains claims directed to the following patentably distinct species: DNA Sequences. Applicant is required under 35 U.S.C. 121 to elect a single disclosed species, **C or D**, for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. The species are independent or distinct because sequence represents a structure of unique functional characteristics.

C. SEQ ID NO:1

D. SEQ ID NO:6

Species Election #3

If any of Inventions **II-IV, IX or XI** are elected, the following election of species is required:

This application contains claims directed to the following patentably distinct species: oligonucleotide derivatives with substitutions of the phophodiester linkage. Applicant is required under 35 U.S.C. 121 to elect a single disclosed species, **a-i**, for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. The species are independent or distinct because each derivative represents a structure of unique functional characteristics.

a. phosphodiester linkage substituted by a phosphorothioate bond

b. phosphodiester linkage substituted by N3'-P5' phosphoamidate bond

c. ribose and phosphodiester linkage substituted by peptide-nucleic acid linkage

d. uracil is substituted by C-5 propynyluracil

e. uracil is substituted by C-5 thiazoleuracil

f. cytosine is substituted by C-5 propynylcytosine

g. cytosine is substituted by phenoxazine-modified cytosine

h. ribose is substituted by 2'-O-propylribose

i. ribose is substituted by 2'-methoxyethoxyribose

Species Election #4

If any of Inventions **V-XIV** are elected, the following election of species is required:

This application contains claims directed to the following patentably distinct species: polypeptide sequences Applicant is required under 35 U.S.C. 121 to elect a single disclosed species, **E-F**, for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. The species are independent or distinct because each amino acid sequence represents a structure of unique structural and functional characteristics.

E. SEQ ID NO:1

F. SEQ ID NO:5

Species Election #5

If any of Inventions **I, II or V** are elected, the following election of species is required:

This application contains claims directed to the following patentably distinct species: diseases or pathological conditions. Applicant is required under 35 U.S.C. 121 to elect a single disclosed species, **1-11**, for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. The species are independent or distinct because disease or pathological conditions has a unique etiology, progression and prognosis.

1. ischemic heart disease
2. cerebral disorder at time of stroke
3. immune response accompanied by organ transplantation

4. nephritis
5. pancreatitis
6. hypertension
7. malignant tumor
8. viral infection
9. pain
10. platelet disorders
11. side effects of chemotherapy

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103(a) of the other invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and the product claims are subsequently found allowable, withdrawn process claims that depend from or otherwise require all the limitations of the allowable product claim will be considered for rejoinder. All claims directed to a nonelected process invention must require all the limitations of an allowable product claim for that process invention to be rejoined.

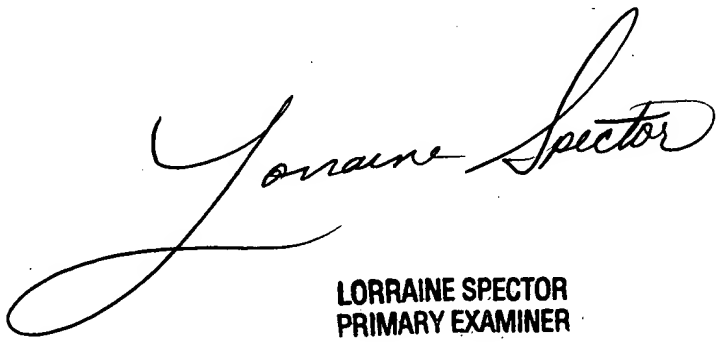
In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103 and 112. Until all claims to the elected product are found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowable product claim will not be rejoined. See MPEP § 821.04(b). Additionally, in order to retain the right to rejoinder in accordance with the above policy, applicant is advised that the process claims should be amended during prosecution to require the limitations of the product claims. **Failure to do so may result in a loss of the right to rejoinder**. Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shulamith H. Shafer, Ph.D. whose telephone number is 571-272-3332. The examiner can normally be reached on Monday through Friday, 8 AM to 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brenda Brumback can be reached on 571-272-0961. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SHS



LORRAINE SPECTOR
PRIMARY EXAMINER